## **CLAIMS**

- 1. A computer system that determines the optimal mix of features and feature options for a process from the perspective of the process owner, the system comprising:
  - means for obtaining process management data, external factor prices and the matrices of value and risk for the owner;
  - means for representing the impact of one or more process features and one or more process feature options on process deliverables;
  - means for mapping process deliverables to the matrices of value and risk for the owner; means for optimizing the mix of process features and feature options from the perspective of the process owner;
  - means for displaying the optimal mix of process features and feature options.
- 2. The system of claim 1 where the real option segment of value is valued using Black Scholes algorithms.
- 3. The system of claim 1 where the matrix of value for the owner is subdivided in up to five segments of value, current operation, real options, derivatives, excess financial assets and market sentiment.
- 4. The system of claim 1 where the display of the optimal mix includes a graphic display of the impact of the optimized process on the efficient frontier of the process owner.
- 5. The system of claim 1 further comprising the use of optimization algorithms for determining the optimal mix of features and feature options.
- 6. The system of claim 1 further comprising the use of genetic algorithms for determining the optimal mix of features and feature options.

- 7. The system of claim 1 further comprising the optional use of simulation system data to represent the impact of one or more features and one or more feature options on process deliverables.
- 8. The system of claim 1 where the matrix of risk for the owner is subdivided in up to five segments: current operation, real options, derivatives, excess financial assets and market sentiment.
- 9. The system of claim 1 where the matrix of risk for the owner includes risk from element variability, risk from external factor variability and event risk.
- 10. The system of claim 1 where the matrix of risk for the owner includes risk from element variability, risk from external factor variability and event risk by segment of value.
- 11. A data processing method for operating a process to maximize value to the owner: obtaining the matrix of value and the matrix of risk for the owner of the process and external factor price information;
- organizing process management information into resources, deliverables, one or more features and one or more feature options;
- determining a contribution of each of one or more features to the process deliverables; mapping the process deliverables, resources and features to the matrices of value and risk for the owner, and
- optimizing the feature and feature option mix to maximize process value from the perspective of the owner.
- 12. A computer readable medium having computer executable instructions thereon for causing a computer to perform the method of claim 11.
- 13. A method for determining the optimal mix of features and feature options for a process from the perspective of the process owner, the system comprising:
- obtaining process management data, external factor prices and the matrices of value and risk for the owner;

representing the impact of one or more features and one or more feature options on process deliverables;

mapping the expected process outputs to the matrices of value and risk for the owner; optimizing the mix of process features and feature options from the perspective of the process owner;

displaying the optimal mix of process features and feature options.

- 14. The method of claim 13 where the real option segment of value is valued using Black Scholes algorithms.
- 15. The method of claim 13 where the matrix of value for the owner is subdivided in up to five segments of value, current operation, real options, derivatives, excess financial assets and market sentiment.
- 16. The method of claim 13 where the display of the optimal mix includes a graphic display of the impact of the optimized process on the efficient frontier of the process owner.
- 17. The method of claim 13 further comprising the use of optimization algorithms for determining the optimal mix of features and feature options.
- 18. The method of claim 13 further comprising the use of genetic algorithms for determining the optimal mix of features and feature options.
- 19. The method of claim 13 further comprising the optional use of simulation system data to represent the impact of one or more features and one or more feature options on process deliverables.
- 20. The method of claim 13 where the matrix of risk for the owner is subdivided in up to five segments: current operation, real options, derivatives, excess financial assets and market sentiment.

- 21. The method of claim 13 where the matrix of risk for the owner includes risk from element variability, risk from external factor variability and event risk.
- 22. The method of claim 13 where the matrix of risk for the owner includes risk from element variability, risk from external factor variability and event risk by segment of value.
- 23. A computer readable medium having computer executable instructions thereon for causing a computer to perform the method of claim 13.